Messy is Good! – A Beckon to Gardeners

Several years ago, the Vermont Agency of Natural Resources held a conference on Pollinator Species with the goal of inspiring more actions for protecting native species for bee and bird habitat. Over clearing and managing our lands has led to a drastic decline in native plants, especially pollinator species, and the message is to leave more wild spaces on your property and... yes, clean up less.

During these "stay home, stay safe" times, spend time listening, watching and learning about the natural world along your shore and improve your well-being surrounded by nature. Don't rake or cut along your shore because it is simply not good for the lake, nor wildlife nor your property. Your shoreland investment is best protected by a maintaining a living, natural shoreland as nature knows best how to filter stormwater and protect lake quality, provide essential food and habitat for wildlife, and protect your property from storm damages.

If you haven't seen the Federation of Vermont Lakes' and Ponds' designs for lakeshore plantings, you can find a copy of "A Guide to Healthy Lakes Using Lakeshore Landscaping" on the <u>FOVLAP web site</u>. This booklet provides a list of many beautiful native pollinator species and helps you identify and plant them along your shore.

Continued loss of habitat threatens both pollinator species and the pollinators and thoughtful shoreland management techniques can help reverse this trend while being protective of water quality.

Doug Tallamy, Chair of the Department of Entomology and Wildlife Ecology at the University of Delaware, has published over 98 research articles and most written published "Nature's Best Hope: A New Approach to Conservation that Starts in Your Yard," a fascinating book that points to the power of home gardeners. If you want to make a difference, Tallamy explains, like literally saving the planet, then as a gardener plant wisely. Plant to sustain what you love: clean lakes, kingfishers, loons, flowers, fruit, fish, and yes, the birds and the bees. Tallamy reports that







The monarch butterfly, *Danaus plexippus*, depends soley on milkweed, *Asclepias syriaca*, to lay its egg and feed as a larva. Milkweed is essential to the survival of the monarch.

gardeners can "change the world" by ensuring their plants provide food for their local wildlife.

This starts by reducing lawns. Lawns are sterile environments and beside from the Canadian geese offer next to no benefit for wildlife nor do they soak up stormwater. Tallamy says "a plant that has fed nothing, as not done its job." What he means is that native plants are essential for wildlife survival and ornamentals and other non-native species, like turf grasses, offer no nutritional value and serve as sterile statues in the landscape.

The monarch butterfly is the poster image for an insect species that has coevolved for 1000s of years with one

The luna moth, actias luna, evolved with the shagbark hickory, Carya ovata, and larva depend on the leaves. Caterpillars, like the luna moth larva, provide the greatest protein source for broods of all birds.

native plant, the milkweed, and without milkweed, there will be no monarchs. But, astonishingly, insects that are specialized to feed on one or a few native plants holds true for 90 percent of all plant-eating insects! If you see a bright fluorescent green luna moth, then you know a shagbark hickory tree is nearby because that is the tree it will lay its eggs on and that is the tree the young larva can climb and reach green leaves to feed on and grow into an adult.

Since most insects have not evolved with non-native turf grass or lawn, they don't have the ability to eat it. Without healthy insect populations, song birds, land mammals, frogs, turtles, and fish (fish get 40% of their protein from terrestrial insects dropped from branches into the lake) cannot survive. If home gardeners reduced or eliminated their lawns and planted native species, then they single-handedly and collectively would be saving biodiversity and ecosystem services faster and better than any other entity. Gardeners have the power to make a beautiful difference on this planet and let's help it happen at home along a Vermont lakeshore. To learn more about shoreland landscaping with native plant species, visit the Lake Wise Program.



Eastern red cedar, *Juniperus virginiana*, provides the only food source for the larval stage of the Olive hairstrike butterfly, *Callophrys gryneaus*. Cedar waxwings are named after this plant because of their feeding habits on the berries. The Olive hairstrike larva also provide essential protein to cedar wax wings and other birds when they rear their broods.